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| APPLICATION NO.   | FILING DATE           | FIRST NAMED INVENTOR          | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-----------------------|-------------------------------|---------------------|------------------|
| 10/578,423  | 05/04/2006            | Paul Johannes Marinus Potters | 003D.0099.U1(US)    | 1676             |
| 29683 7590 02/28/2007<br>HARRINGTON & SMITH, PC<br>4 RESEARCH DRIVE<br>SHELTON, CT 06484-6212 |                       |                               | EXAMINER            |                  |
|   |                       |                               | GUSHI, ROSS N       |                  |
|   |                       |                               | ART UNIT            | PAPER NUMBER ·   |
|   |                       |                               | . 2833              |                  |
|   |                       |                               |                     |                  |
| SHORTENED STATUTOR  | RY PERIOD OF RESPONSE | MAIL DATE                     | DELIVERY MODE       |                  |
| 3 MONTHS 02/28/2007   |                       | PAI                           | PER                 |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

|  | Application No.   | Applicant(s)   |  |  |  |  |
|--|---|--|--|--|--|--|
| Office Action Summary  | 10/578,423  | POTTERS, PAUL JOHANNES<br>MARINUS  |  |  |  |  |
| Office Action Summary  | Examiner  | Art Unit   |  |  |  |  |
|  | Ross N. Gushi   | 2833   |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply   |   |  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period w Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION (6(a). In no event, however, may a reply be time till apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE! | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). |  |  |  |  |
| Status   |   |  |  |  |  |  |
| 1) Responsive to communication(s) filed on   | ·   |  |  |  |  |  |
|  | This action is <b>FINAL</b> . 2b)⊠ This action is non-final.  |  |  |  |  |  |
| •  | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is   |  |  |  |  |  |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  |   |  |  |  |  |  |
| Disposition of Claims  |   |  |  |  |  |  |
| 4) Claim(s) // is/are pending in the application.  |   |  |  |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.   |   |  |  |  |  |  |
| 5) Claim(s) is/are allowed. 6) Claim(s) is/are rejected.   -6, 4, 11-19, 72-28, 30   |   |  |  |  |  |  |
| 6) Claim(s) is/are rejected.   | P 10 2 0 2 1 2 9  |  |  |  |  |  |
| 7) Claim(s) _  | 3,10,20,01  |  |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or  | election requirement.   |  |  |  |  |  |
| Application Papers   |   | ÷  |  |  |  |  |
| 9) The specification is objected to by the Examine   | r.  |  |  |  |  |  |
| 10)⊠∕The drawing(s) filed on is/are: a)⊠ accepted or b) _ objected to by the Examiner.   |   |  |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |   |  |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |   |  |  |  |  |  |
| Priority under 35 U.S.C. § 119   |   |  |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:   | priority under 35 U.S.C. § 119(a)   | )-(d) or (f).  |  |  |  |  |
| 1. Certified copies of the priority documents have been received.  |   |  |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No   |   |  |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage  |   |  |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).  |   |  |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.   |   |  |  |  |  |  |
|  | •   |  |  |  |  |  |
| Attack was attack  |   |  |  |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)   |   |  |  |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date  |   |  |  |  |  |  |
| 3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application 6) Other:  |   |  |  |  |  |  |

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### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102 and 35 USC § 103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in —
- (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
- (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a);

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-6, 9, 15, 23, 24, 25, 26, and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Wu. Regarding claim 1, Wu discloses a connector system of a connector and a counterpart, said connector comprising a pivotally supported locking arm 70 extending towards said counterpart, wherein said locking arm comprises a first locking portion 73 adapted to engage with a second locking portion of said counterpart by a first rotating movement (R1) of said locking arm to a locked position to lock said

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connector and said counterpart and to disengage from said second locking portion by a second rotating movement (R2) to an unlocked position to unlock said connector and said counterpart characterized in that said system is adapted to support said locking arm after said second rotating movement (R2) to prevent said locking arm to rotate backwards to said locked position. Per claim 2 at least one of said connector and said counterpart comprises a support structure 83 to support said locking arm.

Per claim 3, said locking arm comprises at least a bent portion 714 in the direction of said support structure.

Per claim 4, the arm is shaped to contact the counterpart.

Per claim 5, the system comprises a spring member (see par. 0028, the latch is a spring) adapted to exert a biasing force to said locking arm forcing said locking arm in said locked position.

Per claim 6, said spring member is integrated with said locking arm

Per claim 9, said first locking portion comprises a hook portion with a first locking

surface and said second locking portion implicitly comprises a second locking surface

adapted to abut said first locking surface in said locked position.

Per claim 15 at least one of said connector and said counterpart and said locking arm are metallic.

Per claim 23, said system is adapted to allow manipulation of said locking arm to rerotate to said locked position.

Per claim 24 said support structure comprises a support surface with an inclined orientation to allow said locking arm to re-rotate to said locked position.

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Per claim 25, system is adapted to allow sideward movement of said locking arm to allow said locking arm to re-rotate to said locked position.

Per claim 26, Wu discloses a housing with at least housing part forming a first space with an entry for a cable and second space for the arm

Per claim 27, the second space is formed by a cover attached to said housing part.

Claim 16 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu.

Regarding claim 16, to the extent that Wu does not state that the locking arm is stainless steel, at the time of the invention, it would have been obvious to construct the arm out of well known widely available commonly used metals such as stainless steel.

The selection of a known material based on its suitability for its intended purpose would have been obvious. Sinclair & Carroll Col. V. Interchemical Corp., 65 USPQ 297

Regarding claim 30, the method for unplugging the connector as in claims 1-6, 9, 15, 23, 24, 25, 26, 27 would have been obvious.

(1945); In re Leshin, 227 F.2d 197 (CCPA 1960).

Claims 1, 11, 12, 13, 14, 26, and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Koseki. Per claim 1, Koseki discloses a connector system of a connector and a counterpart, said connector comprising a pivotally supported locking arm 6 extending towards said counterpart, wherein said locking arm comprises a first locking portion 66 adapted to engage with a second locking portion of said counterpart by a first rotating movement (R1) of said locking arm to a locked position to lock said connector and said counterpart and to disengage from said second locking portion by a second rotating movement to an unlocked position to unlock said connector and said

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counterpart characterized in that said system is adapted to support said locking arm after said second rotating movement (R2) to prevent said locking arm to rotate backwards to said locked position.

Per claim 11, said locking arm protrudes from a housing of said connector to induce said second rotating movement (R2).

Per claim 12 said connector comprises a housing adapted to expose said locking arm such that said locking arm is available to induce said second rotating movement (R2). Per claim 13 said housing comprises a first space with an entry for a cable and a second space 12 accommodating a part of said locking arm.

Per claim 14, said second space is adapted to incorporate a pivot joint of or for said pivotally supported locking arm.

Per claim 26, Koseki discloses a housing with at least housing part forming a first space with an entry for a cable and second space for the arm

Per claim 27, the second space is formed by a cover attached to said housing part.

Claim 30 rejected under 35 U.S.C. 103(a) as being unpatentable over Koseki. The method for unplugging the connector as in claims 1, 11, 12, 13, 14, 26, and 27 would have been obvious.

Claims 17, 18, 19, 22, 28, are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu in view of Lok. Regarding claims 17, 28, Wu does not show the counterpart connector. Lok discloses a counterpart connector including a metallic (e.g. at 20) board connector housing mounted on a printed circuit board having an entry 240 for a locking arm to a receiving space comprising a second locking portion. At the time of the

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invention, it would have been obvious to use the Wu connector with a connector configured such as taught in Lok including a locking arm opening as taught in Lok. The suggestion or motivation for doing so would have been to secure the connectors together as taught in Wu and Lok.

Per claim 18, said entry is part of an entry for said connector

Per Claim 19 the receiving space further comprises at least one of said support structure and said second locking surface and said ramped surface.

Per claim 22, although Lok does not show a threaded hole, Wu discusses the use of the threaded hole in paragraph 0026. At the time of the invention, it would have been obvious to include a threaded hole as taught in Wu for engagement with the Wu threaded fasteners 50 as suggested in Wu. The suggestion or motivation for doing so would have been to secure the connectors together.

### Allowable Subject Matter

Claims 7, 8, 10, 20, 21, 29, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Regarding claims 7, 8, the prior art does not suggest the system as claimed, including the combination of all the claimed elements, the combination including that the spring member is a separate spring element for said locking arm, that the spring member is further adapted to exert a biasing force perpendicular to a plane of said first and second rotating movement, that the second locking portion comprises a ramped surface adapted to guide a guiding surface of said first locking portion at least prior to said first rotating movement, that the

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housing entry comprises one or more ground springs around said entry, that the entry comprises one or more chamfered guiding walls for said locking arm,

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ross Gushi whose telephone number is (571) 272-2005. If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor, Paula A. Bradley, can be reached at 571-272-2800 extension 33. The phone number for the Group's facsimile is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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